1125-VP-1219 **Jessie M Byrnes*** (`jessie.byrnes@coyotes.usd.edu`). *Bayesian Inference on $P(X < Y)$ Based on Progressive First Failure Censored Samples from Burr Type XII Distributions.* Preliminary report.

Let X and Y have two-parameter Burr XII distributions, respectively. The Bayesian inference of stress strength, $\delta = P(X < Y)$, is investigated under the progressively first failure-censored samples. Many different loss functions are applied to establish the Bayesian estimators of δ. It is due to the complicities of computation and no closed forms of estimators, Markov Chain Monte Carlo procedure is proposed for the simulation study. An example is provided for illustration. (Received September 15, 2016)